## ABSTRACT

The present invention provides a system and method for optimizing compilation time of a program. In architecture, the system includes a compiler that generates the least one block of code from the program; and a compilation optimizer.

The compilation optimizer generates a hash value for a block of code in the program and stores the hash value with the block of code if the hash value is not equal to a prior hash value for the block of code; and skips the optimization of the block of code if the hash value equals the prior hash value. The present invention can also be viewed as a method for optimizing compilation time of a program. The method operates by generating a current hash value for a block of code in the program, skipping the optimization of the block of code if the current hash value equals a prior hash value, and storing the current hash value with the block of code if the hash value is not equal to the prior hash value for the block of code.